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Claims:

1. A method of coating well defined discrete areas of a flexible substrate in a continuous roll to roll manner, the method comprising the steps of
5 creating a lyophobic or lyophilic surface pattern on the substrate, a desired pattern of lyophilic or lyophobic areas being left, overcoating the created surface pattern with a layer of coating solution, the solution withdrawing from the lyophobic areas and collecting on the lyophilic areas.
- 10 2. A method as claimed in claim 1 wherein the coating solution comprises more than one distinct layer, simultaneously overcoated.
- 15 3. A method as claimed in claim 1 wherein the surface pattern is created on the substrate by means of one of: flexographic printing, offset printing, gravure printing, screen printing, lithography, inkjet (continuous or drop on demand), micro contact printing, plasma deposition, plasma treatment, electrostatic spray or optical means using light or a laser to write the pattern.
- 20 4. A method as claimed in claim 1 wherein the steps of creating a surface pattern on the substrate and overcoating the surface pattern with one or more layers of coating solution takes place inline.
- 25 5. A method as claimed in claim 1 wherein the created surface pattern comprises a fluoropolymer material.
6. A method as claimed in claim 1 wherein the created surface pattern includes a silicone release agent.
- 30 7. A method as claimed in claim 1 wherein the created surface pattern comprises a chemical species containing one or more lyophobic moieties and one or more adhesive moieties.

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8. A method as claimed in claim 1 wherein the coating solution is a solvent based solution.
9. A method as claimed in claim 1 wherein the coating solution is a
5 gelatin based material.
10. A method as claimed in claim 1 wherein the coating solution is a polymeric material.
- 10 11. A method as claimed in claim 1 wherein the coating solution has conductive and/or photonic properties.
12. A method as claimed in claim 1 wherein the coating solution comprises a dispersion of carbon nanotubes.
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13. A method as claimed in claim 1 wherein the coating solution includes liquid crystal material.
14. A method as claimed in claim 1 wherein the coating solution
20 includes surfactant.
15. A method as claimed in claim 1 wherein the coating solution is subsequently dried and/or cured.
- 25 16. A method as claimed in claim 1 wherein the composition of the coating solution is sufficiently dilute such that during drying spontaneous dewetting from the lyophobic areas takes place.
17. A method as claimed in claim 1 wherein the coating solution is
30 destabilised at set spatial and temporal locations of the coating.

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18. A method as claimed in claim 1 wherein the surface pattern is switched from lyophobic to lyophilic, or vice versa, by means of one of: temperature, light, pH, electrostatic field, magnetic field.

5 19. A method as claimed in claim 18 wherein a further layer or layers of coating solution is applied over the first overcoat to create a further substrate onto which a further pattern may be created and/or further layers of coating solutions applied.

10 20. A method as claimed in claim 1 wherein the lyophobic surface yields a receding contact angle with the coating solution of 50° or more and the lyophilic surface yields a receding angle of 10° or less.

21. A method as claimed in claim 1 wherein the lyophobic surface
15 yields a receding contact angle with the coating solution of 90° or more and the lyophilic surface yields a receding angle of 5° or less.

22. A method as claimed in claim 1 wherein the coating solution is deposited onto the created surface pattern by a pre-metered coating process.

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23. A method as claimed in claim 1 wherein the coating solution is deposited onto the created surface pattern by a post metered coating process.

24. A method as claimed in claim 1 wherein the coating solution is
25 deposited onto the created surface pattern by means of one of: bead coating, curtain coating, by blade, roll, gravure, air knife, inkjet, electrostatic spray.

25. A method as claimed in claim 1, wherein the substrate is made of a material selected from the group consisting of paper, plastic films, resin-coated
30 paper, synthetic paper, or conductive material.

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26. A display device or component thereof formed by the method of claim 1.

27. A flexible display device or component thereof formed by the method of claim 1.

28. A transparent conductor formed at least in part by the method of claim 1.

29. A patterned layer on a support formed by the method of claim 1.